Product datasheet

Specifications



Circuit breaker ComPacT NSX630N, 50kA at 415VAC, MicroLogic 2.3 trip unit 630A, 4 poles 4d

C63N42D630

Main

Range	ComPacT
Product name	ComPacT NSX
Device short name	NSX630N
Product or component type	Circuit breaker
Device application	Distribution
Poles description	4P
Protected poles description	4D 3D + N/2 3D
Neutral position	Left
[In] rated current	630 A at 40 °C
[Ue] rated operational voltage	690 V AC 50/60 Hz
Network type	AC
Network frequency	50/60 Hz
Suitability for isolation	Yes conforming to EN/IEC 60947-2
Utilisation category	Category A
Breaking capacity	85 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 50 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 42 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 22 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 10 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 85 kA Icu at 240 V AC 50/60 Hz conforming to UL 60947-4-1 50 kA Icu at 480 V AC 50/60 Hz conforming to UL 60947-4-1 20 kA Icu at 600 V AC 50/60 Hz conforming to UL 60947-4-1
Breaking capacity code	N 50 kA 415 V AC
Trip unit name	MicroLogic 2.3
Trip unit technology	Electronic
Trip unit protection functions	LSoI
Control type	Toggle
Circuit breaker mounting mode	Fixed

Complementary

[Ui] rated insulation voltage	800 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV

Excluding VAT, FCA Jabal Ali & are subject to change – check with your local distributor.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Ics] rated service breaking capacity	85 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 50 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 42 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 11 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 10 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	15000 cycles
Electrical durability	8000 cycles at 440 V In/2 4000 cycles at 440 V In 6000 cycles at 690 V In/2 2000 cycles at 690 V In
Power dissipation per pole	39.7 W
Mounting support	Backplate
Mounting position	Horizontal and vertical Flat on the back
Upside connection	Front
Downside connection	Front
Connection pitch	45 mm
Protection type	L : for overload protection (long time) So : for short time short-circuit protection with fixed delay I : for instantaneous short-circuit protection
Trip unit rating	630 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	250...630 A
Long-time protection delay adjustment type tr	Fixed
[tr] long-time delay adjustment range	400 s at 1.5 x Ir 16 s at 6 x Ir 11 s at 7.2 x Ir
Neutral protection setting	0.5 x Ir (3D + N/2) 1 x Ir (4D) No protection (3D)
Thermal memory	20 minutes before and after tripping
Short-time protection pick-up adjustment type Isd	Adjustable 9 settings
[Isd] Short-time protection pick-up adjustment range	1.5...10 x Ir
Short-time protection delay adjustment type tsd	Fixed
Instantaneous protection pick-up adjustment type Ii	Fixed
[Ii] instantaneous protection pick-up adjustment range	6900 A
Earth-leakage protection	Without
Zone selective interlocking ZSI	Without
Number of slots	6 slot(s)
Local signalling	Flashing LED (green) for ready to operate LED 105 % Ir (red) for overload LED 90 % Ir (orange) for overload
Width (W)	185 mm
Height (H)	255 mm
Depth (D)	110 mm
Net weight	8.13 kg

Environment

Standards	EN/IEC 60947-2
Overvoltage category	III
Electrical shock protection class	Class II on front face
Pollution degree	3 conforming to IEC 60664-1
IP degree of protection	IP40 conforming to IEC 60529
IK degree of protection	IK07 conforming to IEC 62262
Ambient air temperature for operation	-25…70 °C
Ambient air temperature for storage	-50…85 °C
Relative humidity	0…95 %
Operating altitude	0...2000 m without derating 2000 m...5000 m with derating

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15.000 cm
Package 1 Width	20.000 cm
Package 1 Length	29.000 cm
Package 1 Weight	7.433 kg
Unit Type of Package 2	S04
Number of Units in Package 2	2
Package 2 Height	30.000 cm
Package 2 Width	40.000 cm
Package 2 Length	60.000 cm
Package 2 Weight	15.566 kg

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**705 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**47 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**1 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.8 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**641 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**15 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**25ca3248-85d0-423a-a9d8-5b7aeb52e7b6**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
Halogen-free status	**Product contains halogen above thresholds**
PVC free	**Yes**
Silicone-free	**No**

Use Longer

Lifetime extension

Updatability	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**56**
End of life manual availability	End of Life Information
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**